

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method comprising:
dynamically establishing ATM adaptation layer 2 (AAL2) virtual channel connection (VCC) channel identifiers (CIDs) on a call-by-call basis using ATM standards-based call control signaling protocols ~~and by mapping each of the CIDs to a~~ respectively virtual path/virtual channel (VP/VC) ~~that forms part of~~ within a virtual user network interface (UNI) to an ATM network.

Claims 2-4 (Canceled).

5. (Previously Presented) A method comprising mapping ATM adaptation layer 2 (AAL2) channel identifiers (CIDs) of one or more virtual channel connections (VCCs), to a virtual path/virtual channel (VP/VC) within a standards-based ATM call control protocol.
6. (Original) The method of claim 5 wherein the standards-based ATM call control protocol is selected from the list comprising UNI 3.1/4.0 and Q.2931.
7. (Previously Presented) The method of claim 5 wherein the mapping is performed at a network edge device communicatively coupled to customer premises equipment.
8. (Original) The method of claim 7 wherein the network edge device is communicatively coupled to the customer premises equipment over time division multiplexed communication channels.
9. (Previously Presented) The method of claim 8 further comprising multiplexing the time division multiplexed communication channels to one or more AAL2 VPs/VCs.
10. (Previously Presented) The method of claim 9 further comprising mapping the one or more AAL2 VPs/VCs to the CIDs prior to mapping the CIDs to the VP/VC.
11. (Currently Amended) Computer-readable instructions, which when implemented by a processor, cause the processor to ~~map ATM adaptation layer 2 (AAL2) channel identifiers (CIDs) to a virtual path/virtual channel (VP/VC) within a standards-based ATM call control protocol~~ provide end to end AAL2 switched virtual

circuit voice service over a core ATM network, network access gateways to said core ATM network, and network edge devices that convert between voice channels and AAL2 streams, the latter used to communicate with the gateways, by configuring an originating network edge device to set up a call with a destination network edge device using an ATM Forum promulgated signaling protocol that specifies procedures for establishing, maintaining, and clearing network connections, and wherein the originating network edge device maps a respective virtual path/virtual circuit (VP/VC) that is referenced in a cell header in accordance with the ATM forum promulgated signaling protocol, to a channel identifier (CID) of a designated AAL2 virtual channel connection (VCC) and sends this signaling information formatted in accordance with said ATM Forum promulgated signaling protocol to one of the network access gateways.

12. (Previously Presented) The computer-readable instructions of claim 11, wherein the computer-readable instructions are embodied in a computer readable medium.

13. (Currently Amended) The computer-readable instructions of claim 11 further comprising additional instructions, which when implemented by the processor, cause the processor to multiplex one or more time division multiplexed communication channels from customer premises equipment, to one or more AAL2 VPs/VCs prior to mapping the AAL2 CIDs~~CID~~ to the respective VP/VC.

14. (Canceled).

15. (New) A network edge device comprising:

means for receiving voice information from channels associated with customer premises equipment;

means for multiplexing the received voice information into AAL2 cells;

means for setting up a switched virtual circuit using an ATM forum user to network interface, UNI; and

means for mapping, in a manner that is transparent to the setting up means, a VP/VC that is associated with a UNI port to a CID on a designated AAL2 VCC that forms part of the UNI's virtual path between the network edge device and a network access gateway.

16. (New) The network edge device of claim 15 wherein the UNI comprises Q.2931.
17. (New) The network edge device of claim 15 wherein the UNI comprises UNI 4.0.
18. (New) The network edge device of claim 15 wherein the UNI comprises UNI 3.1.
19. (New) The network edge device of claim 15 wherein the receiving means comprises part of a time division multiplexed communication channel to the customer premises equipment.